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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,023	06/18/2001	De Ye	2577-10	4697

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.  
1425 K STREET, N.W.  
SUITE 800  
WASHINGTON, DC 20005

EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 08/20/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/701,023

Applicant(s)

Ye et al

Examiner

FOX

Group Art Unit

1638

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE -1- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-53 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☒ Claim(s) 1-53 are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

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Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, 13-15, 17-19, 21-23 and 25-27, drawn to wild-type genes participating in meiocyte formation and methods for their use, and plants transformed therewith.

Group II, claim(s) 7-9, 16, 20, 24, 28-36 and 40, drawn to mutated genes participating in meiocyte formation and methods for their use, and plants transformed therewith.

Group III, claim(s) 10, drawn to wild-type proteins participating in meiocyte formation.

Group IV, claim(s) 11, drawn to antibodies.

Group V, claim(s) 12, drawn to fusion proteins.

Group VI, claim(s) 37 and 41-44, drawn to oligonucleotide probes.

Group VII, claim(s) 38-39, drawn to a method for in vivo mutagenesis.

Group VIII, claim(s) 45-53, drawn to promoters from genes participating in meiocyte formation ligated to foreign genes, methods for their use, and plants transformed therewith.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

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The inventions are linked by the technical feature of a gene participating in meocyte formation. Claim 4 is broadly drawn to any nucleotide sequence which would hybridize under conditions of unspecified stringency to SEQ ID NO:2 or SEQ ID NO:3 or uncharacterized portions thereof. However, this feature is not special because it does not constitute an advance over the prior art. Aarts et al (1993) submitted by Applicants teach an *Arabidopsis* gene which participates in meocyte formation (see, e.g., page 715, Abstract).

Inventions I-VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and different functions.

The invention of Group I, a first product and method of its use, requires isolated wild-type nucleic acids encoding whole proteins involved in meocyte formation, not required by any other group. The invention of Group II, a second product and method of its use, requires mutated nucleic acids encoding whole proteins involved in meocyte formation, not required by any other group. The inventions of Groups I, II and VIII require plant transformation and regeneration techniques and transformed plants, each not required by any other group. The invention of Group III, a third product, involves isolated proteins not required by any other group. The invention of Group IV, a fourth product, requires isolated antibodies not required by any other group. The invention of Group V, a fifth product, requires fusion proteins not required by any other group. The invention of Group VI, a sixth product, requires oligonucleotides and hybridization methods

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not required by any other group. The invention of Group VII, a third process, involves methods of whole plant mutagenesis not required by any other group. The invention of Group VIII, a sixth product and method of its use, requires particular promoters and a multitude of heterologous coding sequences, each not required by any other group.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and fields of search, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

August 15, 2002

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP 180-1638

